



# NGIRI 2019

## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
1	Abasyn University	Islamabad	Automatic Stabilization of Quad copter	56,050	-	56,050
2	Abasyn University	Peshawar	Active Chat monitoring and Suspicious Chat Detection	500	2,000	2,500
3	Abasyn University	Peshawar	Analysis on Twitter Data using Big Data Analytics and Machine learning Techniques	-	10,000	10,000
4	Abasyn University	Peshawar	Comparative analysis of A.I based swarm algorithms	40,000	-	40,000
5	Abasyn University	Peshawar	CUSTOMER CHURN PREDICTION IN RETAIL STORES	-	10,000	10,000
6	Abasyn University	Peshawar	Polio vaccination duty and complain tracker	-	10,000	10,000
7	Abasyn University	Peshawar	PSO Implementation On Hardware	69,530	3,700	73,230
8	Abasyn University	Peshawar	Securing Text Messages Based On Stegano Image	70,000	4,000	74,000
9	Abasyn University	Peshawar	Smart Car control system	37,500	-	37,500
10	Abbottabad University of Science And Technology	Havelian	Web based bomb difusal robotic car	50,600	4,000	54,600
11	Abdul Wali Khan University	Garden	Autonomous Inter-Logistic center transportation service based on Quadcopter	67,450	9,200	76,650
12	Abdul Wali Khan University	Garden	Physiological Monitoring System for Animals through IoT	70,000	10,000	80,000
13	Air University	Islamabad	Automatic Bottle Filling/Capping System with IOT and SCADA Interface	69,500	10,000	79,500
14	Air University	Islamabad	BlindEye	65,544	-	65,544
15	Air University	Islamabad	Controlling Solar Water Pump using variable frequency drive by Android Application	28,020	1,220	29,240
16	Air University	Islamabad	Design and Fabrication of 3D Scanner and 3D Printer	69,874	10,000	79,874
17	Air University	Islamabad	Design and Fabrication of a wearable exoskeleton for power augmentation of arm	70,000	10,000	80,000
18	Air University	Islamabad	Design and Fabrication of Tree Plantation Drone	70,000	10,000	80,000
19	Air University	Islamabad	Design and Implementation of Aeroponic Farming	68,600	10,000	78,600
20	Air University	Islamabad	Design And Implementation of Shunt Active Power Filter For Power Quality Improvement.	14,600	10,000	24,600
21	Air University	Islamabad	DESIGN, IMPLEMENTATION AND CHARACTERIZATION OF CONSTANT TEMPERATURE ANEMOMETRY CIRCUITS FOR MEMS WALL SHEAR STRESS SENSOR	66,180	10,000	76,180
22	Air University	Islamabad	Developing a Proof of Concept of Search and Locate Drone Swarm for disaster hit areas in Pakistan.	70,000	10,000	80,000
23	Air University	Islamabad	Elwctric Vehicle with regenerative braking and battery protection system	59,000	10,000	69,000



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24	Air University	Islamabad	FallUP â€œ Fall Risk Assessment and Prediction Based on Gait Analysis	58,000	-	58,000
25	Air University	Islamabad	Glove For Blind People	24,787	-	24,787
26	Air University	Islamabad	GLUCOGUARD	55,000	-	55,000
27	Air University	Islamabad	Grand Training Auto	70,000	-	70,000
28	Air University	Islamabad	Guidance and monitoring system for AU Parking I	70,000	10,000	80,000
29	Air University	Islamabad	HYBRID ELECTRIC VEHICLE	67,000	10,000	77,000
30	Air University	Islamabad	Solar Powered Fine Dust/Smoke Removal System Using Cockroft Walton Circuit	52,300	8,000	60,300
31	Air University	Islamabad	Stepper motor controlled automated light sensing photo voltaic window blinds	70,000	5,000	75,000
32	Air University	Islamabad	Weather data simulation and experimental calculations of heating and cooling loads	61,770	2,150	63,920
33	Al-Hamd Islamic University	Quetta	Automated Parking System	67,000	-	67,000
34	Al-Hamd Islamic University	Quetta	Improving the Quality of Dominos Products through Mining Summarization and Visualization of manual Consumers Reviews	-	10,000	10,000
35	Al-Hamd Islamic University	Quetta	Soil Moisture Monitoring System	70,000	-	70,000
36	Al-Hamd Islamic University	Quetta	Voice based Email service for visually challenged people	-	10,000	10,000
37	Allama Iqbal Open University	Main	E Portal for finding missing persons	40,000	10,000	50,000
38	Allama Iqbal Open University	Main	GPS Based Professional Services	69,000	10,000	79,000
39	Allama Iqbal Open University	Main	Helping Farmer Online	35,000	10,000	45,000
40	Army Public College of Management and Sciences	APCOM, Rawalpindi	A new 3D Eyeball Tracking System	13,000	-	13,000
41	Army Public College of Management and Sciences	APCOM, Rawalpindi	Connected Greenhouse using IoT	33,100	8,000	41,100
42	Army Public College of Management and Sciences	APCOM, Rawalpindi	Hexapod Robot	29,510	8,500	38,010
43	Army Public College of Management and Sciences	APCOM, Rawalpindi	LaTeX Code generator for tabular figures	5,000	7,950	12,950
44	Army Public College of Management and Sciences	APCOM, Rawalpindi	PLC controlled automatic bottle filling system using robotic arm	36,200	9,500	45,700
45	Army Public College of Management and Sciences	APCOM, Rawalpindi	RFID Based Attendance System with SMS Alert and IOT Access	18,700	7,000	25,700
46	Army Public College of Management and Sciences	APCOM, Rawalpindi	RFID based library management system	16,540	9,150	25,690



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47	Army Public College of Management and Sciences	APCOM, Rawalpindi	Smart Gun	41,500	10,000	51,500
48	Bahauddin Zakariya University	Main	E-Housing	57,600	-	57,600
49	Bahria University	Karachi	AUTOMATIC LESION DETECTION SYSTEM (ALDS) FOR SKIN CANCER CLASSIFICATION USING DEEP LEARNING	69,549	-	69,549
50	Bahria University	Karachi	BAHADUR BOT	20,000	-	20,000
51	Bahria University	Karachi	Driver Assistant system for sleep prevention with automatic braking mechanism	32,570	9,000	41,570
52	Bahria University	Karachi	Electrical Vehicle charging station	69,800	10,000	79,800
53	Bahria University	Karachi	Electro X	8,760	-	8,760
54	Bahria University	Karachi	Emergency Clinic Multi-Sensor Monitoring Prototype Using e-Health Platform	66,800	5,000	71,800
55	Bahria University	Karachi	Energy Harvesting Tile	69,910	10,000	79,910
56	Bahria University	Karachi	EYE GAZE MOVEMENT BASED DETECTION AND CLASSIFICATION OF AUTISM	40,000	-	40,000
57	Bahria University	Karachi	Heart Sounds Classification using Artificial Neural Network	70,000	5,000	75,000
58	Bahria University	Karachi	Humanoid Chat Robot	70,000	10,000	80,000
59	Bahria University	Karachi	Hybrid Power System	70,000	10,000	80,000
60	Bahria University	Karachi	IoT Based Agriculture System	41,960	-	41,960
61	Bahria University	Karachi	IoT based Data Logger System for Weather Monitoring using Wireless Sensor Networks	59,920	9,350	69,270
62	Bahria University	Karachi	Mind Controlled Robot Using Arduino and EEG Headset	69,100	-	69,100
63	Bahria University	Karachi	MobiTest	60,500	9,100	69,600
64	Bahria University	Karachi	MY EYE	25,500	9,000	34,500
65	Bahria University	Karachi	PHOTOVOLTAIC ENERGY TRAINER	70,000	10,000	80,000
66	Bahria University	Karachi	shirt folding machine	69,850	9,325	79,175
67	Bahria University	Karachi	Shred :The plastic Machine	69,690	3,900	73,590
68	Bahria University	Karachi	Smart Water Monitoring System	52,699	-	52,699
69	Bahria University	Karachi	Thermoelectric Generator	66,700	8,010	74,710



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70	Bahria University	Karachi	Transmission Line Inspection Drone	42,800	4,000	46,800
71	Bahria University	Karachi	Visulo Try On	14,598	8,200	22,798
72	Bahria University	Lahore	Augmented Adverts	16,500	10,000	26,500
73	Bahria University	Main	Common starter for multiple induction motors	9,840	7,950	17,790
74	Bahria University	Main	Gesture controlled robotic arm using leap motion	59,350	-	59,350
75	Bahria University	Main	IoT based Smart Waste Management System	17,570	6,000	23,570
76	Bahria University	Main	Multi Purpose Agribot	68,655	10,000	78,655
77	Bahria University	Main	Personal Identification using Facial Recognition and visualizing details on HUD	40,260	5,010	45,270
78	Bahria University	Main	Route Management of Emergency Vehicle and Traffic Density Control	61,042	10,000	71,042
79	Bahria University	Main	Smart Glove	34,200	10,000	44,200
80	Bahria University	Main	Smart Monitoring and Security System for Infants	44,185	7,050	51,235
81	Bahria University	Main	SMART PREPAID ELECTRICITY SYSTEM	20,900	7,000	27,900
82	Bahria University	Main	Smart Terrain Quadraped Robot	52,500	9,800	62,300
83	Bahria University	Main	Structure Scanning and Designing Device	59,665	9,750	69,415
84	Balochistan University of Engineering and Information Technology	Khuzdar	Autonomous Firefighting Robot	5,400	-	5,400
85	Balochistan University of Engineering and Information Technology	Khuzdar	Coal mine safety helmet	14,259	1,000	15,259
86	Balochistan University of Engineering and Information Technology	Khuzdar	Development of a Blockchain Based System for Management of Patients Record for a Health Centre in Khuzdar	66,000	9,500	75,500
87	Balochistan University of Engineering and Information Technology	Khuzdar	IoT Based Smart Energy Meter	9,149	-	9,149
88	Balochistan University of Engineering and Information Technology	Khuzdar	Smart Home Automation Arduino based	25,750	5,000	30,750
89	Balochistan University of Information Technology, Engineering & Management Sciences	Quetta	An Automated Drip Irrigation and Water Management System for Agricultural Field in Pakistan	59,000	-	59,000
90	Balochistan University of Information Technology, Engineering & Management Sciences	Quetta	Android App for Neural-Network Based Classification of Common Diseases in Tomato Leaves	69,300	-	69,300
91	Balochistan University of Information Technology, Engineering & Management Sciences	Quetta	Battery Health Monitoring for Commercialized Electric Vehicle Batteries: Lithium-Ion	65,786	9,200	74,986
92	Balochistan University of Information Technology, Engineering & Management Sciences	Quetta	Evolution of locomotion gait for Quadrapeds	12,600	620	13,220



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93	Balochistan University of Information Technology, Engineering & Management Sciences	Quetta	Experimental Validation of Tidal Energy Systems through Real-Time Simulation of Water Waves Using Hydrodynamic Flume Tank	69,750	10,000	79,750
94	Balochistan University of Information Technology, Engineering & Management Sciences	Quetta	Intelligent Obstacle Human Detection and Navigational Smart Stick Based On Deep Learning for Blind People	16,410	-	16,410
95	Balochistan University of Information Technology, Engineering & Management Sciences	Quetta	Performance Enhancement of PV Panel using Fuzzy Logic Control	61,427	9,900	71,327
96	Balochistan University of Information Technology, Engineering & Management Sciences	Quetta	Plc based Industrial bottles filling and liquid mixing for control & Automation laboratory	47,300	-	47,300
97	Balochistan University of Information Technology, Engineering & Management Sciences	Quetta	PORTABLE ATMOSPHERIC WATER GENERATOR USING SOLAR ENERGY	46,744	6,000	52,744
98	Balochistan University of Information Technology, Engineering & Management Sciences	Quetta	Sensor Based Smart Traffic Controller With Real Time Monitoring	63,200	10,000	73,200
99	Balochistan University of Information Technology, Engineering & Management Sciences	Quetta	Smart Emergency Services	8,500	600	9,100
100	Balochistan University of Information Technology, Engineering & Management Sciences	Quetta	World war 3	68,986	-	68,986
101	Benazir Bhutto Shaheed University	Karachi	AssemBox IDE for Assembly	17,500	10,000	27,500
102	Benazir Bhutto Shaheed University	Karachi	Diagnosis of Glaucoma by Cup-to-Disc Ratio Mobile Application	53,160	-	53,160
103	Benazir Bhutto Shaheed University	Karachi	Drone Control by Hand Gestures through webcam	65,250	4,000	69,250
104	Benazir Bhutto Shaheed University	Karachi	My Weather Monitoring System	18,124	9,000	27,124
105	Benazir Bhutto Shaheed University	Karachi	Priv U	45,000	-	45,000
106	Benazir Bhutto Shaheed University	Karachi	Smart Home	15,000	10,000	25,000
107	Benazir Bhutto Shaheed University	Karachi	The smart reminder application with QR-BARCODE Technology	48,000	10,000	58,000
108	Benazir Bhutto Shaheed University	Karachi	Thin Client Platform for Examination System	66,400	3,500	69,900
109	Capital University of Science and Technology	Main	Automated Printed Circuit Board Fabricating Machine	70,000	10,000	80,000
110	Capital University of Science and Technology	Main	BlindROID	65,770	9,800	75,570
111	Capital University of Science and Technology	Main	Combat and Spy Robot	66,800	10,000	76,800
112	Capital University of Science and Technology	Main	IOT Based Smart Irrigation System	6,270	6,000	12,270
113	Capital University of Science and Technology	Main	Smart Glove for Handicapped people	58,300	8,000	66,300
114	CECOS University of IT & Emerging Sciences	Main	Animatronic Hand	68,100	-	68,100
115	CECOS University of IT & Emerging Sciences	Main	Automated Railway Level Crossing System	45,950	6,800	52,750



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116	CECOS University of IT & Emerging Sciences	Main	Developing IOT base system for electric vehicle	70,000	-	70,000
117	CECOS University of IT & Emerging Sciences	Main	diseased wheat plant detection using drone	65,000	5,000	70,000
118	CECOS University of IT & Emerging Sciences	Main	Early Diabetics Detection system	40,000	10,000	50,000
119	CECOS University of IT & Emerging Sciences	Main	Face Recognition Attendance System	40,000	-	40,000
120	CECOS University of IT & Emerging Sciences	Main	Geotechnical study and survey of urbanizing peshawar region and their representation using GIS	60,000	-	60,000
121	CECOS University of IT & Emerging Sciences	Main	Gesture Controlled Quadcopter	69,480	1,000	70,480
122	CECOS University of IT & Emerging Sciences	Main	Multi platform Shooting Game	32,000	-	32,000
123	CECOS University of IT & Emerging Sciences	Main	Robotic Arm Control Interface	12,500	-	12,500
124	CECOS University of IT & Emerging Sciences	Main	SCADA application for protection of grid station	69,981	10,000	79,981
125	CECOS University of IT & Emerging Sciences	Main	Sensor Guided Robot	31,000	9,000	40,000
126	CECOS University of IT & Emerging Sciences	Main	Smart mirror	40,550	2,000	42,550
127	CECOS University of IT & Emerging Sciences	Main	Staircase Climbing Robot	41,600	2,660	44,260
128	CECOS University of IT & Emerging Sciences	Main	Thermal analysis of buildings using BIM and ecotect	57,000	10,000	67,000
129	CECOS University of IT & Emerging Sciences	Main	Vehicles Location Tracking and Jamming Immune System	42,650	9,600	52,250
130	City University of Science & Information Technology	Peshawar	DESIGN OF WATER GARBAGE COLLECTING ROBOT	24,650	5,570	30,220
131	City University of Science & Information Technology	Peshawar	Mitigating Industrial Power Consumption Through Automatic Power Factor Correction Using PIC Microcontroller	18,110	5,750	23,860
132	COMSATS University of Information Technology	Abbottabad	automated and precise CNC machine	69,830	-	69,830
133	COMSATS University of Information Technology	Abbottabad	Dynamic Analysis of Moving magnet linear actuator using end ferromagnetic poles	69,250	9,500	78,750
134	COMSATS University of Information Technology	Abbottabad	Gesture Based Wheel Chair Control for Disabled People	65,710	8,400	74,110
135	COMSATS University of Information Technology	Abbottabad	Smart Farming Through Internet of Agriculture Things and Robots	70,000	9,000	79,000
136	COMSATS University of Information Technology	Abbottabad	Smart thekedar	35,000	9,800	44,800
137	COMSATS University of Information Technology	Attock	Dr. Smart: Responsive Health Monitoring System using Blockchain Network	70,000	9,550	79,550
138	COMSATS University of Information Technology	Attock	Exploiting OLM and Learning Analytics Visualization with respect to Students Learning Styles and the Affective States	70,000	10,000	80,000



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139	COMSATS University of Information Technology	Attock	Gender Prediction Using Periocular Region	60,000	-	60,000
140	COMSATS University of Information Technology	Attock	Machine learning model for Cardio vascular risk assessment	70,000	10,000	80,000
141	COMSATS University of Information Technology	Attock	Machine Learning Model for Wheat Yield Estimation	70,000	10,000	80,000
142	COMSATS University of Information Technology	Attock	Sorting System Based on Weight and Metallic Characteristics of Objects using PLC	69,600	10,000	79,600
143	COMSATS University of Information Technology	Lahore	DIP Based Beverage Inspection on Conveyor	45,400	8,400	53,800
144	COMSATS University of Information Technology	Lahore	Dynamically Reconfigurable Photovoltaic Energy Harvesting System	46,530	9,500	56,030
145	COMSATS University of Information Technology	Lahore	End to End Framework for Neurological Health Monitoring	70,000	10,000	80,000
146	COMSATS University of Information Technology	Lahore	Extended Urdu Natural Language Toolkit (Ex unlt)	-	-	-
147	COMSATS University of Information Technology	Lahore	Intelligent Brain Computer Interfacing BCI based personalized healthcare system of neuro rehabilitation	70,000	6,000	76,000
148	COMSATS University of Information Technology	Lahore	Kitaabkiduniya	25,000	9,000	34,000
149	COMSATS University of Information Technology	Lahore	Module based Organised Document Classification System	70,000	10,000	80,000
150	COMSATS University of Information Technology	Lahore	Solar Powered Three-Dimensional Mapping and Dimensional Parameter computer for distance calculations and cloning Architecture Using LIDAR	70,000	10,000	80,000
151	COMSATS University of Information Technology	Lahore	Speaker Identification using deep learning	68,925	7,800	76,725
152	COMSATS University of Information Technology	Lahore	Vehicle Tracking and Security with Ecall Standard Framework	26,610	1,500	28,110
153	COMSATS University of Information Technology	Main	ABABEEL PLANTATION DRONE	70,000	-	70,000
154	COMSATS University of Information Technology	Main	Atom	47,000	-	47,000
155	COMSATS University of Information Technology	Main	Design and Fabrication of Fire Fighting Robot	53,700	6,500	60,200
156	COMSATS University of Information Technology	Main	FPGA Implementation of ECDSA for ITS application	50,000	-	50,000
157	COMSATS University of Information Technology	Main	Implementation of Security Algorithms for Cellular V to X on FPGA	55,000	-	55,000
158	COMSATS University of Information Technology	Main	Intelligent waste management	69,463	5,000	74,463
159	COMSATS University of Information Technology	Main	MAMTA	12,500	2,500	15,000
160	COMSATS University of Information Technology	Main	Plants Analysis	70,000	-	70,000
161	COMSATS University of Information Technology	Main	Posture Rehabilitation with Integrated Feedback Loop	29,560	2,500	32,060



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162	COMSATS University of Information Technology	Main	ShopVersia	70,000	10,000	80,000
163	COMSATS University of Information Technology	Main	Unified Control for DC Microgrids	70,000	10,000	80,000
164	COMSATS University of Information Technology	Main	Urdu Natural Language Processing	67,000	8,000	75,000
165	COMSATS University of Information Technology	Sahiwal	ANTI-COUNTERFITTING SYSTEM FOR PREVENTING COUNTERFITTED MEDICIENS	69,210	10,000	79,210
166	COMSATS University of Information Technology	Sahiwal	Blind Vision Shirt	17,970	6,000	23,970
167	COMSATS University of Information Technology	Sahiwal	Design and Fabrication of Micro Texturing Machine	69,126	8,300	77,426
168	COMSATS University of Information Technology	Sahiwal	Design and Fabrication of wear test rig	69,975	700	70,675
169	COMSATS University of Information Technology	Sahiwal	Production of Bio-diesel and Corrosion Testing	69,250	10,000	79,250
170	COMSATS University of Information Technology	Wah	Automatic Control of a Belt Weigh-feeder	18,500	1,000	19,500
171	COMSATS University of Information Technology	Wah	Autonomous Weapon System for Defence Organizations	35,270	3,550	38,820
172	COMSATS University of Information Technology	Wah	contaminated water detector	70,000	10,000	80,000
173	COMSATS University of Information Technology	Wah	Criminal Activities Detection and Control Monitoring System through Drone	69,900	10,000	79,900
174	COMSATS University of Information Technology	Wah	E-Voting System Using Hyperledger Fabric Blockchain	54,000	-	54,000
175	COMSATS University of Information Technology	Wah	Fatal movement in rural areas	70,000	10,000	80,000
176	COMSATS University of Information Technology	Wah	Hand Gesture Vocalizer for Mute People	45,380	1,500	46,880
177	COMSATS University of Information Technology	Wah	Implementation of Semi Assistant Robot with Image Processing and Speech recognition capabilities	57,080	9,800	66,880
178	COMSATS University of Information Technology	Wah	Intelligent Safety Warning and Alert System for Car Driving	28,378	800	29,178
179	COMSATS University of Information Technology	Wah	Protection of three phase induction motor	14,130	3,700	17,830
180	COMSATS University of Information Technology	Wah	Smart Health monitoring system using IOT	8,208	620	8,828
181	Dadabhoj Institute of Higher Education	Main	Implementing MIMO communication system in FPGA using efficient hardware software co-Design	70,000	-	70,000
182	Dawood University of Engineering and Technology	Main	Feasibility study on SCADA system for gas distribution network and its prototype development	50,600	2,000	52,600
183	Dawood University of Engineering and Technology	Main	Prediction based accident prevention system for vehicles	39,700	-	39,700
184	Dawood University of Engineering and Technology	Main	Smart Robot For Cleaning Solar Panels	65,500	4,800	70,300





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185	Dawood University of Engineering and Technology	Main	Smart Stair Climbing Vehicle with Self Balancing Mechanism	65,700	10,000	75,700
186	Dawood University of Engineering and Technology	Main	three phase power analyzer	19,000	1,000	20,000
187	DHA Suffa University	Main	Atmospheric Water Generator	68,478	8,600	77,078
188	DHA Suffa University	Main	Indigenous Design and Fabrication of Electric Bicycle with Regenerative Braking System	69,700	3,300	73,000
189	Fatima Jinnah Women University	Main	Contact less Palm print Authentication System	20,000	-	20,000
190	Fatima Jinnah Women University	Main	DEVELOPMENT OF LOW COST BIOSIGNAL ACQUISITION SYSTEM FOR ECG, EMG AND STRESS MONITORING	15,090	8,500	23,590
191	Fatima Jinnah Women University	Main	DIIPSDMT: Design and Implementation of an Intelligent and Prognostic System for Diabetes using Data Mining Techniques	9,000	-	9,000
192	Fatima Jinnah Women University	Main	Energy Meter and Home Automation via Internet of Things using Android Application	10,175	3,200	13,375
193	Fatima Jinnah Women University	Main	Lower Limb Mobility Assistance Using Soft Robotics	69,991	9,200	79,191
194	Fatima Jinnah Women University	Main	Peer to peer ridesharing application using blockchain technology	28,000	10,000	38,000
195	Fatima Jinnah Women University	Main	Secure Data Exchange For Internet of Things Devices	39,000	-	39,000
196	Fatima Jinnah Women University	Main	Smart wearable for Autism	53,400	10,000	63,400
197	Fatima Jinnah Women University	Main	Wearable Soft Robot for Upper limb Assistance and Rehabilitation	68,183	9,500	77,683
198	Federal Urdu University of Arts, Science and Technology	Islamabad	Android Based Industrial Faults Monitoring And Control System	36,630	9,815	46,445
199	Federal Urdu University of Arts, Science and Technology	Islamabad	IOT Based Water Quality Monitoring And Management System	12,885	-	12,885
200	Federal Urdu University of Arts, Science and Technology	Main	Face Recognition Attendance System	54,400	-	54,400
201	Federal Urdu University of Arts, Science and Technology	Main	Sarafa Cloud	-	4,000	4,000
202	Foundation University	Islamabad	Adaptive Sign Language Translator	49,000	4,000	53,000
203	Foundation University	Islamabad	Efficient car cooling system using peltier with zero fuel consumption	54,200	9,700	63,900
204	Foundation University	Islamabad	Induction Furnace	63,300	7,900	71,200
205	Foundation University	Islamabad	IoT Based Tolling and Weighing System for Heavy Vehicles	46,500	10,000	56,500
206	Foundation University	Islamabad	Myo Prosthetic Arm	32,540	3,500	36,040
207	Foundation University	Islamabad	Prepaid Smart Card Energy Meter and Load Control Through Bluetooth	22,000	6,800	28,800



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208	Foundation University	Islamabad	Stress Estimation from Video	37,500	2,500	40,000
209	Foundation University	Islamabad	Two Degree of freedom PID Gun Control System	66,650	10,000	76,650
210	Ghulam Ishaq Khan Institute of Engineering Sciences and Technology	Main	Automated Micro Pipetting System for Bio Chemical Fluid Handling	67,650	8,850	76,500
211	Ghulam Ishaq Khan Institute of Engineering Sciences and Technology	Main	Autonomous driving with miniature cars	45,400	10,000	55,400
212	Ghulam Ishaq Khan Institute of Engineering Sciences and Technology	Main	Design and Development of Warehouse Robot	69,620	9,650	79,270
213	Ghulam Ishaq Khan Institute of Engineering Sciences and Technology	Main	Fully Autonomous Car	69,800	9,000	78,800
214	Ghulam Ishaq Khan Institute of Engineering Sciences and Technology	Main	Implementation of EFI and Hybrid System on a bike	70,000	10,000	80,000
215	Ghulam Ishaq Khan Institute of Engineering Sciences and Technology	Main	IOT Bins	68,000	-	68,000
216	Ghulam Ishaq Khan Institute of Engineering Sciences and Technology	Main	Quantization of Fully Convolutional networks for semantic segmentation	70,000	-	70,000
217	Ghulam Ishaq Khan Institute of Engineering Sciences and Technology	Main	Sign Language Translating Gloves	60,500	9,500	70,000
218	Ghulam Ishaq Khan Institute of Engineering Sciences and Technology	Main	The Impact of IT capabilities on Firm Performance and the mediating role of Supply Chain Agility	65,500	-	65,500
219	Government College University	Faisalabad	Blockchain Based Data Archiving System	46,340	10,000	56,340
220	Government College University	Faisalabad	Comparative study for druggable target finding and drug designing against strains of human pathogen Streptococcus pyogens using various computational tools	70,000	10,000	80,000
221	Government College University	Faisalabad	Detection of face emotions on live web camera conversation	62,000	-	62,000
222	Government College University	Faisalabad	E Pharma Care	10,000	-	10,000
223	Government College University	Faisalabad	Liftdroid	25,606	1,000	26,606
224	Government College University	Faisalabad	Smart Solar Grass Cutter	28,200	10,000	38,200
225	Government College Women University	Sialkot	E-learning Platform for Teenagers	60,000	5,000	65,000
226	Government College Women University	Sialkot	Eminent content reading recommend-er system	70,000	10,000	80,000
227	Government College Women University	Sialkot	Health and Fitness	70,000	10,000	80,000
228	Government College Women University	Sialkot	High security locator using android devices	55,000	9,999	64,999
229	Government College Women University	Sialkot	Remote Mobile	70,000	10,000	80,000
230	Government College Women University, Faisalabad	Main	Car Parking System using QR code	-	2,000	2,000



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
231	Government College Women University, Faisalabad	Main	GSM Based Industry Protection System	25,500	1,000	26,500
232	Habib University	Karachi	Determining the Efficacy of Haptic Feedback and Virtual Reality in Flight Simulation Training Devices	14,299	215	14,514
233	Hamdard University	Main	Automatic Human Following Shopping Cart	65,000	10,000	75,000
234	Hamdard University	Main	Autonomous Robotic Cafe	55,650	-	55,650
235	Hamdard University	Main	Clinic Management System	40,035	9,200	49,235
236	Hamdard University	Main	Door unlock by facial recognition	23,000	3,000	26,000
237	Hamdard University	Main	IoT Based Industrial Safety Monitoring And Controlling Prototype	70,000	10,000	80,000
238	Hamdard University	Main	IoT based precise micro vertical farming	59,200	10,000	69,200
239	Hamdard University	Main	IOT based Real time Health Monitoring for Unprivileged arrears of Pakistan	50,288	10,000	60,288
240	Hamdard University	Main	IOT based submersible pump panel	45,000	10,000	55,000
241	Hamdard University	Main	Notice Board interface with Internet of things	21,600	5,000	26,600
242	Hamdard University	Main	PLC Based Food Dehydrator	26,300	8,000	34,300
243	Hamdard University	Main	PROTOTYPING AND STABILIZING OF UNDER-ACTUATED REMOTELY OPERATED VEHICLE	64,686	6,800	71,486
244	Hamdard University	Main	Shrimp Structure Rover Robot	41,780	9,400	51,180
245	Hamdard University	Main	Single Phase Cross Switch Multilevel Inverter for Ambulance Equipment	70,000	10,000	80,000
246	Hamdard University	Main	Smart building based on IOT	33,650	10,000	43,650
247	Hamdard University	Main	Smart Mirror Based Home Automation Using Voice Commands And Mobile App	45,170	5,000	50,170
248	Hamdard University	Main	Smart Monitoring For Water Dispensers	53,760	3,200	56,960
249	Hamdard University	Main	SMART SOLAR POWERED IRRIGATION SYSTEM	43,702	8,000	51,702
250	Hamdard University	Main	Stress Therapy through Peltier Cooling	70,000	10,000	80,000
251	Hamdard University	Main	VEHICLE ANTI-THEFT SYSTEM Through Face Recognition Using GSM & GPS Technology	62,400	7,200	69,600
252	HITEC University	Main	Ambulance Drone For Health Care	65,000	5,000	70,000
253	HITEC University	Main	Application Acceleration For ARM and NEON Based Architectures	12,400	-	12,400



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
254	HITEC University	Main	Brain Computer Interface Based Home Automation	57,800	9,000	66,800
255	HITEC University	Main	Controll Robot for Spraying Pesticides	67,450	10,000	77,450
256	HITEC University	Main	Development of an Effective Hardware Integration Layer of Wearable Sensors for Remote Health Monitoring System	70,000	10,000	80,000
257	HITEC University	Main	Fire Fighter Robot	46,920	3,000	49,920
258	HITEC University	Main	FPGA Based Text to Speech System for Paralyse Person	61,360	9,800	71,160
259	HITEC University	Main	Landmines Detection Robotic Vehicle Using Deep Learning	48,400	-	48,400
260	HITEC University	Main	Micro controller and sensor based Gesture Vocaliser for Mute / Paralysed Persons and Home Automation	59,900	8,375	68,275
261	HITEC University	Main	Mobi Gate Android App Based Gate Controller	12,000	-	12,000
262	HITEC University	Main	MODELING, DESIGN & IMPLEMENTATION OF CNC MACHINE USING STEPPER MOTOR	60,345	10,000	70,345
263	HITEC University	Main	Self Driving Car using artificial intelligence	66,600	10,000	76,600
264	ILMA University, formerly Institute of Business & Technology (IBT)	Main	Arduino based voice and remote controlled home automation system	7,150	7,000	14,150
265	ILMA University, formerly Institute of Business & Technology (IBT)	Main	Avion Formula Electric Car	70,000	10,000	80,000
266	ILMA University, formerly Institute of Business & Technology (IBT)	Main	Cloud Based industry monitoring system	45,640	3,000	48,640
267	ILMA University, formerly Institute of Business & Technology (IBT)	Main	DESIGN AND DEVELOPMENT OF A INTELLIGENT MIRROR USING RASPBERRY PI	41,500	-	41,500
268	ILMA University, formerly Institute of Business & Technology (IBT)	Main	Fire Fighter Robot	11,780	-	11,780
269	ILMA University, formerly Institute of Business & Technology (IBT)	Main	Spy Robo car	9,000	-	9,000
270	Indus University	Main	Buddy Bot for teaching assistance using artificial intelligence	70,000	-	70,000
271	Indus University	Main	Chauffeur's Distraction and inattention recognition	53,850	2,450	56,300
272	Indus University	Main	Cost-effective Automatic Peritoneal Dialysis System With Additional Health Monitoring Features	68,628	4,899	73,527
273	Indus University	Main	Design of a Hybrid Electric Vehicle System for Environmental Friendly Solution in Public Transport	69,500	9,360	78,860
274	Indus University	Main	Distribution transformer monitoring and protection based IOT	42,227	3,000	45,227
275	Indus University	Main	I SWEEP AN AUTONOMOUS FLOOR CLEANING ROBOT	37,250	-	37,250
276	Indus University	Main	lot based home automation with face recognition surveillance	61,680	1,430	63,110



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
277	Indus University	Main	IOT based Smart Wearable labour kit	29,750	10,000	39,750
278	Indus University	Main	Load management system	29,400	-	29,400
279	Indus University	Main	PATIENT MONITORING SYSTEM	43,000	9,700	52,700
280	Indus University	Main	Renewable Energy Sources With Monitoring System	65,000	-	65,000
281	Indus University	Main	Self Sufficient Hybrid Powered Smart Irrigation System	69,480	8,000	77,480
282	Indus University	Main	Smart oil rig controlled by SCADA	69,600	9,000	78,600
283	Indus University	Main	Smart Surveillance System Based on Real-Time Identification (SSBRI)	15,000	1,770	16,770
284	Indus University	Main	Smart Vertical Aquaponics System	14,300	4,000	18,300
285	Indus University	Main	UNDER SURFACE OBJECT DETECTION SMART ROBOT BASED ON GSM COMMUNICATION (UODSRS)	34,920	4,200	39,120
286	Indus University	Main	Underground Cables Fault Detection in Electrical Power Distribution system based on IoT	36,500	-	36,500
287	Information Technology University	Lahore	Automated standalone gas heater	29,805	112	29,917
288	Information Technology University	Lahore	Drug Refrigeration Monitoring System	3,924	3,350	7,274
289	Information Technology University	Lahore	Low Cost Breast Cancer Pre Screening Device	62,200	7,990	70,190
290	Information Technology University	Lahore	Microwave Imaging For Breast Cancer Detection	70,000	10,000	80,000
291	Information Technology University	Lahore	Rotten Vegetable Detection	50,000	-	50,000
292	Institute of Business Administration	City Campus	VR platform for educatopm	70,000	10,000	80,000
293	Institute of Industrial Electronics Engineering	Main	RFID Based Synchronized Line Following Multiple Vehicles.	54,250	6,284	60,534
294	Institute of Industrial Electronics Engineering	Main	Walking Biped Humanoid Robot	67,600	2,000	69,600
295	Institute of Space Technology	Islamabad	A Novel Technique for Detection and Tracking of a Friendly Target Using Bistatic SAR	69,000	1,000	70,000
296	Institute of Space Technology	Islamabad	Automated Aquaponics System	65,900	4,000	69,900
297	Institute of Space Technology	Islamabad	Automatic Storage and Retrieval System	30,000	2,000	32,000
298	Institute of Space Technology	Islamabad	Deployment of customized payloads using CubeSat satellite	61,000	-	61,000
299	Institute of Space Technology	Islamabad	Gesture controlled computer using accelerometer	40,000	-	40,000



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
300	Institute of Space Technology	Islamabad	GPS BASED AUTONOMOUS ROVER	28,900	5,000	33,900
301	Institute of Space Technology	Islamabad	Hydro Vortex Turbine	31,000	9,000	40,000
302	Institute of Space Technology	Islamabad	industrial mass production ThreeD Printer	69,750	9,200	78,950
303	Institute of Space Technology	Islamabad	Speed Detection of Ground Moving Vehicles using GSM based Passive Radar	48,000	-	48,000
304	International Islamic University	Islamabad	Advanced Target Tracking System for Armoured Vehicles	37,850	5,600	43,450
305	International Islamic University	Islamabad	Digital Gym Instructor	29,460	2,500	31,960
306	International Islamic University	Islamabad	EARS or Environmental Audio Recognition System	17,400	1,750	19,150
307	International Islamic University	Islamabad	Intelligent water resource management system using iot and machine learning	59,012	7,571	66,583
308	International Islamic University	Islamabad	IoT based smart washing machine	24,974	8,450	33,424
309	International Islamic University	Islamabad	IoT based Sustainable Water Management and Distribution Control System	35,755	5,000	40,755
310	International Islamic University	Islamabad	Monitoring and Controlling of Greenhouse using Internet of Things IoT	37,330	-	37,330
311	International Islamic University	Islamabad	Smart Attendance and Monitoring System (SAMS)	70,000	10,000	80,000
312	International Islamic University	Islamabad	The design of vehicle classification system on low cost embedded board	22,400	-	22,400
313	Iqra National University	Main	Analyzing the Diverse Impacts of Conventional Distributed Energy Resources on Distribution System	62,950	-	62,950
314	Iqra National University	Main	Compressed Air Energy Storage	53,300	10,000	63,300
315	Iqra National University	Main	Design renewable energy from solar and wind Hybrid energy model	60,000	10,000	70,000
316	Iqra National University	Main	Recycled Lithium Ion Cells Powerwall for Homes	42,650	-	42,650
317	Iqra University	Main	BIDIRECTIONAL COMMUNICATION IN LI FI TECHNOLOGY	56,000	4,600	60,600
318	Iqra University	Main	CAD-IT (Automated 3D modeling)	68,000	6,000	74,000
319	Iqra University	Main	Demonstration of Underwater Wireless Sensors Network	68,385	-	68,385
320	Iqra University	Main	Design and Implementation of Six Axis Drilling Robot	69,000	10,000	79,000
321	Iqra University	Main	EmoSense	61,300	10,000	71,300
322	Iqra University	Main	Hydroponics with IoT	59,650	10,000	69,650



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
323	Iqra University	Main	I See You	53,820	10,000	63,820
324	Iqra University	Main	SCADA BASED DIGITAL MIXER	70,000	10,000	80,000
325	Iqra University	Main	SCUIVT	70,000	10,000	80,000
326	Iqra University	Main	Smart Street Lights	59,944	10,000	69,944
327	Iqra University	Main	Smart Water Flow Monitoring and Maintenance System using IoT	65,600	10,000	75,600
328	Iqra University	Main	Three D Scanner	65,860	10,000	75,860
329	Iqra University	Main	Variable Flow Control through VFD for Level Precision & Energy savings in Power System	69,500	10,000	79,500
330	Iqra University	Main	VOIP USING ASTERISK	70,000	9,000	79,000
331	Islamia College Peshawar	Main	Raspberry Pi Based Real-Time Hand-Gestures Recognition Using Flex Sensors	17,205	-	17,205
332	Isra University	Hyderabad	Design and Implement Of Vertical Axis Wind Turbine	69,860	-	69,860
333	Jinnah University for Women	Karachi	DRIP-Irrigation System and crop monitoring using IOT and renewable energy	66,140	10,000	76,140
334	Jinnah University for Women	Karachi	DysPal - Assistive Learning System	70,000	10,000	80,000
335	Jinnah University for Women	Karachi	Kisan in Tech	64,900	10,000	74,900
336	Jinnah University for Women	Karachi	Pakistan Autism Learning System	61,192	-	61,192
337	Jinnah University for Women	Karachi	Smart Learning Companion	70,000	10,000	80,000
338	Jinnah University for Women	Karachi	Toddler Track	68,800	10,000	78,800
339	Karakoram International University	Main	Coherence Estimation Through InSAR Data to Analyze Mountain Glacier Changes	70,000	10,000	80,000
340	Karakoram International University	Main	Development of a Web Portal and Landslide hazard assessment Map for Karakorum Highway	70,000	10,000	80,000
341	Karakoram International University	Main	Snow-cover Trend Analysis in Shyok River Basin Using GIS Techniques	70,000	10,000	80,000
342	Khawaja Fareed University of Engineering and Information Technology	Main	Contextualizing Water Profligacy and Conservation	8,470	-	8,470
343	Khawaja Fareed University of Engineering and Information Technology	Main	DD SPEAK-TO (DUMB & DEAF SPEAKING SYSTEM)	33,800	2,000	35,800
344	Khawaja Fareed University of Engineering and Information Technology	Main	Design and Development of an Efficient Prepaid Smart Energy Meter	17,095	10,000	27,095
345	Khawaja Fareed University of Engineering and Information Technology	Main	Design and implementation of automated pattern design grass cutter	29,690	8,000	37,690



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
346	Khawaja Fareed University of Engineering and Information Technology	Main	Fetal Heart Rate monitoring system	30,065	9,000	39,065
347	Khawaja Fareed University of Engineering and Information Technology	Main	IoT Based Secure Irrigation System	6,240	-	6,240
348	Khawaja Fareed University of Engineering and Information Technology	Main	navigation glasses for blind people	22,500	-	22,500
349	Khawaja Fareed University of Engineering and Information Technology	Main	SILENT HEART ATTACK PREDICTION and MONITORING SYSTEM	11,000	-	11,000
350	Khawaja Fareed University of Engineering and Information Technology	Main	Virtual Shopping	70,000	-	70,000
351	Kohat University of Science and Technology (KUST)	Main	Intelligent Recovery of Patients on Road Accidents in ITS incorporating Fog Computing	70,000	10,000	80,000
352	Lahore Garrison University	Main	Agribot (Agriculture Robot)	70,000	10,000	80,000
353	Lahore Garrison University	Main	E Cultivation Using IoT	19,140	9,000	28,140
354	Lahore Garrison University	Main	Smart Agriculture with Deep Learning	70,000	-	70,000
355	Lahore Garrison University	Main	Solar Powered Automated Cutting Machine	70,000	10,000	80,000
356	Lahore Garrison University	Main	VR based Physiotherapy	70,000	10,000	80,000
357	Lahore Leads University	Main	Concentrated Solar Power System	65,800	9,540	75,340
358	Lahore Leads University	Main	Prototype Of Automatic Underground Cable Fault Detection Using Ardiuno	14,614	-	14,614
359	Lahore Leads University	Main	Three phase dry type transformer	54,000	3,000	57,000
360	Lahore University of Management Sciences	Lahore	3D Realistic Character Animation using 3D Laser Scanning and Photogrammetry and Bio-Mechanical Motion Capture	43,100	-	43,100
361	Lahore University of Management Sciences	Lahore	COTY Humanoid Interactive Therapy Aide Robot	9,697	300	9,997
362	Lahore University of Management Sciences	Lahore	How well am I driving	70,000	2,180	72,180
363	Lahore University of Management Sciences	Lahore	Power Management Unit PMU for Smart consumption and distribution of Electricity on DC MicroGrid	69,402	8,080	77,482
364	Lahore University of Management Sciences	Lahore	Water Quality Assessment	65,700	-	65,700
365	Mehran University of Engineering & Technology	Main	Achieving high input power factor for integrated buck flyback converter	43,900	7,860	51,760
366	Mehran University of Engineering & Technology	Main	Controlled Drug Delivery Using Nanotechnology for Parkinson Syndrome	49,500	8,000	57,500
367	Mehran University of Engineering & Technology	Main	Demand side management based on load scheduling and power shedding by using smart grid	68,370	1,800	70,170
368	Mehran University of Engineering & Technology	Main	Design and Implementation of Multifunction CNC Machine	66,780	9,621	76,401





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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
369	Mehran University of Engineering & Technology	Main	Design and Integration of AC/DC Hybrid Microgrid by Implementing MPPT and EMS	62,200	7,600	69,800
370	Mehran University of Engineering & Technology	Main	Design of Digital ROM (Range of Motion) Measurement System	60,128	10,000	70,128
371	Mehran University of Engineering & Technology	Main	Design of UAV autonomous charging for surveillance	52,600	7,500	60,100
372	Mehran University of Engineering & Technology	Main	Development of a cascaded control scheme for asymmetrical half bridge multilevel inverter	59,150	3,000	62,150
373	Mehran University of Engineering & Technology	Main	Efficient route tracking for delivery of cooked food	16,500	1,590	18,090
374	Mehran University of Engineering & Technology	Main	Energy saving and speed control by using Variable Frequency Drive on three phase induction motor driving centrifugal fans	65,600	-	65,600
375	Mehran University of Engineering & Technology	Main	Fabrication of multi-modular Input Series Output Series Isolated DC-DC converters with control scheme	61,196	9,500	70,696
376	Mehran University of Engineering & Technology	Main	GPS Controlled Delivery Service by Drone	54,900	3,000	57,900
377	Mehran University of Engineering & Technology	Main	Harnessing Power of Quanta: Analysis, development and implementation of quantum algorithms and devices	70,000	10,000	80,000
378	Mehran University of Engineering & Technology	Main	Highway based vehicle driven Vertical axis wind turbine with solar system	70,000	9,800	79,800
379	Mehran University of Engineering & Technology	Main	Implementation of smart automation system for efficient power utilization	40,575	4,210	44,785
380	Mehran University of Engineering & Technology	Main	Power generation using vertical axis wind turbine and solar panel	69,780	8,880	78,660
381	Mehran University of Engineering & Technology	Main	Preparation of Levofloxacin Loaded Anti-Microbial Chitosan and Silk Fibroin Scaffold for Wound Dressing	50,000	9,280	59,280
382	Mehran University of Engineering & Technology	Main	Preparation of Silk Fibroin coated Antimicrobial polypropylene meshes for hernia repair	28,500	10,000	38,500
383	Mehran University of Engineering & Technology	Main	Quadcopter Based Spray Drone for Agriculture Application	52,745	5,000	57,745
384	Mehran University of Engineering & Technology	Main	Real Time Water Quality Monitoring System	64,200	-	64,200
385	Mehran University of Engineering & Technology	Main	Robotic Arm Controllable Using the Neural EEG Signals	70,000	-	70,000
386	Mehran University of Engineering & Technology	Main	Self Driving car using Lidar sensing and image processing technology	56,600	7,910	64,510
387	Mehran University of Engineering & Technology	Main	Smart Liquid Measurement Device	20,950	9,000	29,950
388	Mehran University of Engineering & Technology	Main	Virtual Shopping Assistant	30,000	10,000	40,000
389	Mehran University of Engineering & Technology	Main	Water Doctor - Smart Water Management System	69,500	10,000	79,500
390	Minhaj University	Main	Self Driving Car	68,394	9,600	77,994
391	Mirpur University of Science and Technology (MUST)	Mirpur	Android based water supply management system	62,450	3,000	65,450



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
392	Mirpur University of Science and Technology (MUST)	Mirpur	Design, Development and Experimental Analysis of a Self Cleaning Mechanism for Engine Radiator	70,000	10,000	80,000
393	Mirpur University of Science and Technology (MUST)	Mirpur	E Farming and Agriculture	50,000	1,450	51,450
394	Mirpur University of Science and Technology (MUST)	Mirpur	Gesture hand control robot	69,600	-	69,600
395	Mirpur University of Science and Technology (MUST)	Mirpur	High Speed data transfer using LiFi technology	60,140	5,940	66,080
396	Mirpur University of Science and Technology (MUST)	Mirpur	Smart Helmet And Intelligent Bike System	45,000	-	45,000
397	MNS University of Agriculture, Multan	Main	An Automated Content Base Facial Image Retrieval using Conventional Neural Networks	67,900	-	67,900
398	MNS University of Agriculture, Multan	Main	Automated Identification of Mosquitoes using acoustic signals	68,000	7,000	75,000
399	MNS University of Agriculture, Multan	Main	Blinds People Examination System Using Leap sensor	70,000	-	70,000
400	MNS University of Agriculture, Multan	Main	Cargo Warehouse Automation	61,300	500	61,800
401	MNS University of Agriculture, Multan	Main	Farm Data Sampling and Analytics System	69,000	9,000	78,000
402	MNS University of Agriculture, Multan	Main	Heart Wear	12,500	8,000	20,500
403	MNS University of Agriculture, Multan	Main	Save Food For Charity	-	10,000	10,000
404	MNS University of Agriculture, Multan	Main	Sensor Based Climate Automation in Agriculture	69,000	1,000	70,000
405	MNS University of Agriculture, Multan	Main	Smart Car Automation System	62,400	9,300	71,700
406	MNS University of Agriculture, Multan	Main	Smart Health Care System	55,550	7,250	62,800
407	MNS University of Agriculture, Multan	Main	Smart Hydroponics Control System	41,160	8,965	50,125
408	MNS University of Agriculture, Multan	Main	Smart Surface Irrigation System	60,050	10,000	70,050
409	MNS University of Agriculture, Multan	Main	Virtual Tour of MNSUAM	70,000	-	70,000
410	Mohammad Ali Jinnah University	Karachi	Automated Vehicle Profiling System	70,000	10,000	80,000
411	Mohammad Ali Jinnah University	Karachi	Autonomous Car	70,000	10,000	80,000
412	Mohammad Ali Jinnah University	Karachi	Rescue Copter	70,000	10,000	80,000
413	Mohammad Ali Jinnah University	Karachi	Zambeel	10,000	-	10,000
414	Muhammad Nawaz Sharif University of Engineering & Technology	Main	Breast Cancer Detection & Classification using Transfer Learning	70,000	-	70,000



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
415	Muhammad Nawaz Sharif University of Engineering & Technology	Main	Electrical Power Generation through speed breaker rack pinion mechanism with the help of PMDC Motor and DC to DC Converters	16,330	7,020	23,350
416	National Textile University	Main	Analysis of Emerging Technology Trends around the Globe	20,000	10,000	30,000
417	National Textile University	Main	Efficient driver drowsiness detection at moderate levels of drowsiness	50,069	-	50,069
418	National Textile University	Main	InsightDive	58,600	10,000	68,600
419	National Textile University	Main	Smart Speaking System for Deaf and Dumb	70,000	10,000	80,000
420	National Textile University	Main	SmartGo	70,000	10,000	80,000
421	National Textile University	Main	Tripals	44,920	5,300	50,220
422	National University of Computer and Emerging Sciences (FAST-NU)	Chiniot-Faisalabad	Agriculture Robot for Weed Detection, Classification and Spray using Deep Neural Network	68,565	-	68,565
423	National University of Computer and Emerging Sciences (FAST-NU)	Chiniot-Faisalabad	Design and Development of Mobile Training Toolkit for Solar PV System	65,000	-	65,000
424	National University of Computer and Emerging Sciences (FAST-NU)	Karachi	Atmospheric Water Generator	24,110	6,300	30,410
425	National University of Computer and Emerging Sciences (FAST-NU)	Karachi	AUV Autonomous Underwater	42,160	8,330	50,490
426	National University of Computer and Emerging Sciences (FAST-NU)	Karachi	Ensemble of Deep Learning and Local Features for Robbery Detection	45,000	10,000	55,000
427	National University of Computer and Emerging Sciences (FAST-NU)	Karachi	Formation Control of Multiple UAVs	58,550	7,000	65,550
428	National University of Computer and Emerging Sciences (FAST-NU)	Karachi	Home Automation using HoloLens	70,000	-	70,000
429	National University of Computer and Emerging Sciences (FAST-NU)	Karachi	Learning Imbalanced Datasets using Differentiated Regularization of the Loss Function	70,000	-	70,000
430	National University of Computer and Emerging Sciences (FAST-NU)	Karachi	Pharmoogle	51,000	9,500	60,500
431	National University of Computer and Emerging Sciences (FAST-NU)	Karachi	Rapid Detection Of Crime Using Deep Learning On Fog Nodes	70,000	-	70,000
432	National University of Computer and Emerging Sciences (FAST-NU)	Karachi	Six axis articulated robotic arm for industrial applications	70,000	10,000	80,000
433	National University of Computer and Emerging Sciences (FAST-NU)	Karachi	The Eye Stick Walking Stick that Sees	69,540	8,600	78,140
434	National University of Computer and Emerging Sciences (FAST-NU)	Lahore	autonomous lawn mower	57,800	4,000	61,800
435	National University of Computer and Emerging Sciences (FAST-NU)	Lahore	ROOT Expert System	66,500	3,000	69,500
436	National University of Computer and Emerging Sciences (FAST-NU)	Main	A Green wind Energy Harvester from Traffic Movement	37,220	3,000	40,220
437	National University of Computer and Emerging Sciences (FAST-NU)	Main	Atmospheric Water Generator: Making Air Drinkable	59,382	10,000	69,382



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
438	National University of Computer and Emerging Sciences (FAST-NU)	Main	Augmented Reality Challenger	39,500	-	39,500
439	National University of Computer and Emerging Sciences (FAST-NU)	Main	Classification of Liver Diseases using Neural Networks	35,000	3,274	38,274
440	National University of Computer and Emerging Sciences (FAST-NU)	Main	Deep Fashion	70,000	-	70,000
441	National University of Computer and Emerging Sciences (FAST-NU)	Main	Smart Water Meter Infrastructure Using IoT	12,433	6,863	19,296
442	National University of Computer and Emerging Sciences (FAST-NU)	Main	Vehicle License Plate Recognition using Deep Learning Techniques	68,000	-	68,000
443	National University of Computer and Emerging Sciences (FAST-NU)	Peshawar	Acoustic Signals Based Drone Localization using Machine Learning	62,000	6,400	68,400
444	National University of Computer and Emerging Sciences (FAST-NU)	Peshawar	PLC BASED ENERGY MANAGEMENT SYSTEM	50,670	5,420	56,090
445	National University of Modern Languages	Main	Android Profile Changing and Location Tracking Through SMS	68,500	10,000	78,500
446	National University of Modern Languages	Main	Artificial Hand for Disabled Persons	70,000	9,995	79,995
447	National University of Modern Languages	Main	CarGari Automobile Monitoring and Telematics	69,399	10,000	79,399
448	National University of Modern Languages	Main	Fake Product Review Monitoring and Sentiment Analysis	22,771	10,000	32,771
449	National University of Modern Languages	Main	IOT Based Smart Kitchen	22,500	10,000	32,500
450	National University of Modern Languages	Main	OCR Based Compiler for Java and C plus plus	19,500	10,000	29,500
451	National University of Science and Technology (NUST)	(CAE) College of Aeronautical Engineering	Autonomous Indoor Navigation through Quadcopter in GPS denied environment	70,000	10,000	80,000
452	National University of Science and Technology (NUST)	(CAE) College of Aeronautical Engineering	Development of an IoT Security Swiss Army Knife	51,825	10,000	61,825
453	National University of Science and Technology (NUST)	(CAE) College of Aeronautical Engineering	Development of Through Wall Intrusion Detection System	65,325	-	65,325
454	National University of Science and Technology (NUST)	(CAE) College of Aeronautical Engineering	Implementation of optimized algorithm for adaptive GPS obfuscation	70,000	10,000	80,000
455	National University of Science and Technology (NUST)	(CAE) College of Aeronautical Engineering	Prototype Development of Wireless Haptic Glove for hand interface with robotic claw	69,950	3,000	72,950
456	National University of Science and Technology (NUST)	(CEME) College of Electrical & Mechanical Engineering	3 Phase Solar Inverter with VFD For Induction Motor Using Space Vector Pulse Width Modulation	50,920	1,400	52,320
457	National University of Science and Technology (NUST)	(CEME) College of Electrical & Mechanical Engineering	Altitude Heading and Reference System Black Box for Vehicles	18,500	-	18,500
458	National University of Science and Technology (NUST)	(CEME) College of Electrical & Mechanical Engineering	CNC Hotwire Cutter	67,000	7,000	74,000
459	National University of Science and Technology (NUST)	(CEME) College of Electrical & Mechanical Engineering	Development of a Low Cost Tilt Sensing System for Building Health Monitoring	62,200	10,000	72,200
460	National University of Science and Technology (NUST)	(CEME) College of Electrical & Mechanical Engineering	Development of ATV Mounted Seeding Mechanism	69,950	10,000	79,950



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
461	National University of Science and Technology (NUST)	(CEME) College of Electrical & Mechanical Engineering	HearSmart	67,095	10,000	77,095
462	National University of Science and Technology (NUST)	(CEME) College of Electrical & Mechanical Engineering	Industry 4.0	1,000	-	1,000
463	National University of Science and Technology (NUST)	(CEME) College of Electrical & Mechanical Engineering	Intelligent Legal Adviser using Artificial Intelligence algorithms and NLP	6,000	5,240	11,240
464	National University of Science and Technology (NUST)	(CEME) College of Electrical & Mechanical Engineering	Manzareh	70,000	10,000	80,000
465	National University of Science and Technology (NUST)	(CEME) College of Electrical & Mechanical Engineering	Micro Controller Based depth Measurement	69,271	-	69,271
466	National University of Science and Technology (NUST)	(CEME) College of Electrical & Mechanical Engineering	Smart clothing Monitoring muscle growth	69,790	10,000	79,790
467	National University of Science and Technology (NUST)	(CEME) College of Electrical & Mechanical Engineering	Smart phones based fruit quality estimation	27,900	5,500	33,400
468	National University of Science and Technology (NUST)	(CEME) College of Electrical & Mechanical Engineering	Solar Panel Cleaning Robot	69,800	10,000	79,800
469	National University of Science and Technology (NUST)	(MCS) Military College of Signals	An artificial intelligence based workplace assistant	65,000	10,000	75,000
470	National University of Science and Technology (NUST)	(MCS) Military College of Signals	Aurduino based controller for a Quadcopter	69,600	10,000	79,600
471	National University of Science and Technology (NUST)	(MCS) Military College of Signals	COMET Communicate and Explore Through it	52,135	2,300	54,435
472	National University of Science and Technology (NUST)	(MCS) Military College of Signals	Cypher Maze	58,700	5,250	63,950
473	National University of Science and Technology (NUST)	(MCS) Military College of Signals	Mechanical Transport Automation System	69,700	10,000	79,700
474	National University of Science and Technology (NUST)	(MCS) Military College of Signals	NetXploit The Smart Network Pentester	57,700	5,600	63,300
475	National University of Science and Technology (NUST)	(MCS) Military College of Signals	Pollen Hunt	65,000	10,000	75,000
476	National University of Science and Technology (NUST)	(MCS) Military College of Signals	Smart Helmet for Accident Detection Reporting SHADR	35,800	5,000	40,800
477	National University of Science and Technology (NUST)	(MCS) Military College of Signals	Smart Street Light System	31,000	9,000	40,000
478	National University of Science and Technology (NUST)	(MCS) Military College of Signals	Virtual Visits	11,000	4,500	15,500
479	National University of Science and Technology (NUST)	(PNEC) Pakistan Naval Engineering College	End of Line Automation	69,500	-	69,500
480	National University of Science and Technology (NUST)	(PNEC) Pakistan Naval Engineering College	Static Power Sources Synchronization	62,650	2,000	64,650
481	National University of Science and Technology (NUST)	Main	CanvasInsight	70,000	10,000	80,000
482	National University of Science and Technology (NUST)	Main	Croptronics	63,810	7,550	71,360
483	National University of Science and Technology (NUST)	Main	MUAWIN	69,150	4,000	73,150



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
484	National University of Science and Technology (NUST)	Main	Smart Indoor Navigation Application for Visually Impaired People Using Near Field Communication (NFC), Bluetooth (BT) and Radio Frequency Identification (RFID) Technology.	60,000	-	60,000
485	National University of Science and Technology (NUST)	Main	Smart Trolley	25,450	1,000	26,450
486	National University of Science and Technology (NUST)	Main	SummitUp Content Summary Generator	60,000	5,000	65,000
487	National University of Science and Technology (NUST)	Main	TexCAPTCHA	65,000	-	65,000
488	Nazeer Hussain University	Main	single phase power factor correction	70,000	8,600	78,600
489	Nazeer Hussain University	Main	Solar Panel Controlling and Tracking System (A smart tracker and controller to charge automatically solar system)	68,020	-	68,020
490	NED University of Engineering & Technology	Main	A Comparative Analysis of Neural Network Architectures for Energy Theft Detection	68,400	9,000	77,400
491	NED University of Engineering & Technology	Main	A Novel Multi Motor Controller with Wired and Wireless Monitoring and Control	46,000	-	46,000
492	NED University of Engineering & Technology	Main	AI Fabric Designer	-	-	-
493	NED University of Engineering & Technology	Main	Applications in Engineering using Augmented Reality	70,000	-	70,000
494	NED University of Engineering & Technology	Main	Augmented and Virtual Reality in education	-	-	-
495	NED University of Engineering & Technology	Main	Automated Diagnosis of Diabetic Retinopathy using FPGA	69,200	-	69,200
496	NED University of Engineering & Technology	Main	AUTOMATIC CONTROLLING AND MONITORING OF UNDERWATER ENVIRONMENT SYSTEM.	58,210	4,900	63,110
497	NED University of Engineering & Technology	Main	Autonomous floor cleaning robot	42,300	-	42,300
498	NED University of Engineering & Technology	Main	Cardiac Auscultation Simulator	61,806	7,700	69,506
499	NED University of Engineering & Technology	Main	Cognitive test during experimentally inducing pain	65,000	3,000	68,000
500	NED University of Engineering & Technology	Main	Data Acquisition and monitoring of parameters of Induction Motor via wireless communication	42,900	9,200	52,100
501	NED University of Engineering & Technology	Main	Development of relay test unit	60,000	10,000	70,000
502	NED University of Engineering & Technology	Main	Distribution Transformer Monitoring and Mapping System	18,880	-	18,880
503	NED University of Engineering & Technology	Main	Efficient , Economical & Eco-Friendly Generation Of Electricity Based On Portable Biogas Plant	57,000	10,000	67,000
504	NED University of Engineering & Technology	Main	Efficient Instrumentation and Controlling of Automobiles Using CAN Protocol	23,500	4,500	28,000
505	NED University of Engineering & Technology	Main	FPGA BASED DATA SECURITY DEVICE	65,390	2,600	67,990
506	NED University of Engineering & Technology	Main	Gesture Controlled Humanoid Robot with vision in Virtual Reality	67,500	-	67,500



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
507	NED University of Engineering & Technology	Main	Human Motion Analysis using Machine Learning	9,125	4,375	13,500
508	NED University of Engineering & Technology	Main	lot based Meteorological drone for weather forecasting and agriculture	17,000	-	17,000
509	NED University of Engineering & Technology	Main	Phobia Therapy Using Virtual Reality	43,000	-	43,000
510	NED University of Engineering & Technology	Main	Real Time Air Quality Monitoring using IoT	21,750	10,000	31,750
511	NED University of Engineering & Technology	Main	Real time State Estimation and health indication of Power System	14,000	10,000	24,000
512	NED University of Engineering & Technology	Main	REALTIME MULTI HUMAN TRACKING AND ACTION DETECTION	7,500	-	7,500
513	NED University of Engineering & Technology	Main	Smart Helmet using Augmented Reality	69,910	9,250	79,160
514	NED University of Engineering & Technology	Main	Smart Home Cleaning Robot	36,820	-	36,820
515	NED University of Engineering & Technology	Main	Smart Pipe And Water Quality Checking System	29,890	3,620	33,510
516	NED University of Engineering & Technology	Main	SMART PORTABLE GLOVE GESTURE VOCALIZER FOR DEAF AND DUMB	13,840	-	13,840
517	NED University of Engineering & Technology	Main	To investigate HIV TB coinfection dynamics in TB patients	-	-	-
518	NED University of Engineering & Technology	Main	Virtual Shopping System With Supporting Gadgets	25,000	5,000	30,000
519	NED University of Engineering & Technology	Main	VISION A smart cane for visually impaired	20,099	2,470	22,569
520	Newports Institute of Communications & Economics	PECHS	Controlling Industrial Machinery & Equipment over Air Gestures	70,000	9,300	79,300
521	Newports Institute of Communications & Economics	PECHS	Face Recognition System	50,000	-	50,000
522	Newports Institute of Communications & Economics	PECHS	Kindergarten Learning School	69,999	4,500	74,499
523	PAF Karachi Institute of Economics and Technology	Main	Attitude Indicator Using Mechanical Gyroscope	56,500	8,500	65,000
524	PAF Karachi Institute of Economics and Technology	Main	Auto Balancing Human Carrier	29,660	6,000	35,660
525	PAF Karachi Institute of Economics and Technology	Main	Computer Vision Based Autonomous Driving Car	18,700	2,270	20,970
526	PAF Karachi Institute of Economics and Technology	Main	Customize High Performance Inductor Designing	70,000	10,000	80,000
527	PAF Karachi Institute of Economics and Technology	Main	Design and fabrication of Anthropomorphic Robotic Elegant System Operated with Notable Assistance ARESONA	46,470	1,200	47,670
528	PAF Karachi Institute of Economics and Technology	Main	Design of GPS AntiJamming Antenna System	51,000	9,000	60,000
529	PAF Karachi Institute of Economics and Technology	Main	Force Feedback SideStick For A Training Simulator	37,100	6,000	43,100



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## LIST OF APPROVED FYF



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
530	PAF Karachi Institute of Economics and Technology	Main	Pattern Forming Robots Using Swarm Intelligence	69,500	6,000	75,500
531	PAF Karachi Institute of Economics and Technology	Main	Robot Operating System based Mobile Robot	69,200	10,000	79,200
532	PAF Karachi Institute of Economics and Technology	Main	ROS BASED MOBILE MANIPULATOR HAVING GESTURE CONTROL	62,700	7,000	69,700
533	PAF Karachi Institute of Economics and Technology	Main	Smart Healthcare Monitoring System Based On IoT	11,052	7,900	18,952
534	PAF Karachi Institute of Economics and Technology	Main	Thermal design of a Turbine for a 2.5 kVA Organic Rankine Cycle system	70,000	-	70,000
535	PAF Karachi Institute of Economics and Technology	North	Farm bot	34,400	10,000	44,400
536	PAF Karachi Institute of Economics and Technology	North	FYP Automation System	-	5,868	5,868
537	PAF Karachi Institute of Economics and Technology	North	Meeting Minutes Recorder	30,000	8,000	38,000
538	PAF Karachi Institute of Economics and Technology	North	Smart Traffic Signal	69,996	9,980	79,976
539	PAF Karachi Institute of Economics and Technology	North	Smart Trolley	19,780	8,400	28,180
540	Pakistan Institute of Engineering & Technology, Multan	Multan	Energy efficient Heat Stress Management System for Dairy Farms	64,350	1,000	65,350
541	Pakistan Institute of Engineering & Technology, Multan	Multan	Intelli Light System for Metro Bus	28,374	10,000	38,374
542	Pakistan Institute of Engineering & Technology, Multan	Multan	Wirelessly Controlled Mechanically Guided Robotic Arm For Picking And Placing Delicate things	32,252	-	32,252
543	Pakistan Institute of Engineering and Applied Sciences (PIEAS)	Islamabad	Integration of motion sensor coil gun and high voltage fence for the development of hybrid security system	57,575	7,700	65,275
544	Pakistan Institute of Engineering and Applied Sciences (PIEAS)	Islamabad	Neural Network approach for Non-Invasive Detection of Eye Disease(s)	68,533	6,513	75,046
545	Pakistan Institute of Engineering and Applied Sciences (PIEAS)	Islamabad	Realtime EMG Signal Processing for the Control of a Motorized Prosthetic Hand	69,800	10,000	79,800
546	PMAS - Arid Agriculture University	University Institute of Information Technology	Adventure Hike VR	65,250	9,000	74,250
547	PMAS - Arid Agriculture University	University Institute of Information Technology	Artificial Intelligent Cleaner	57,610	9,750	67,360
548	PMAS - Arid Agriculture University	University Institute of Information Technology	Go Ease Exerciser	45,950	10,000	55,950
549	PMAS - Arid Agriculture University	University Institute of Information Technology	Motorway Accident Avoidance System During Fog	70,000	10,000	80,000
550	PMAS - Arid Agriculture University	University Institute of Information Technology	Preschool Kids Learning VR Game	64,719	10,000	74,719
551	PMAS - Arid Agriculture University	University Institute of Information Technology	Suspect detection using image processing	68,000	-	68,000
552	Punjab University	PUCIT, New Campus	Smart Navigation Glasses	43,600	5,000	48,600





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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
553	Quaid-e-Awam University of Engineering, Science & Technology (QUEST)	Main	Advance Traffic Control System with barrier and lights	44,920	500	45,420
554	Quaid-e-Awam University of Engineering, Science & Technology (QUEST)	Main	HOME AUTOMATION USING ANDROID THROUGH WI-FI	26,840	-	26,840
555	Quaid-e-Awam University of Engineering, Science & Technology (QUEST)	Main	Poultry Environment Monitoring System using IoT	69,900	10,000	79,900
556	Quaid-e-Awam University of Engineering, Science & Technology (QUEST)	Main	Reading the Human EEG and operate app with mind	29,000	-	29,000
557	Quaid-e-Awam University of Engineering, Science & Technology (QUEST)	Main	Self Driving System Using Machine Learning	69,680	-	69,680
558	Quaid-e-Awam University of Engineering, Science & Technology (QUEST)	Main	Trajectory planning of robotic arm for industrial application	19,000	9,500	28,500
559	Quaid-e-Azam University	Main	Centralized Speech Enhancement for Audio Conferencing	51,994	-	51,994
560	Quaid-e-Azam University	Main	continuous time third order multi bit sigma modulator	70,000	10,000	80,000
561	Quaid-e-Azam University	Main	Event Detection System	69,500	10,000	79,500
562	Quaid-e-Azam University	Main	Implementation of GANs as a tool in Fashion Industry	70,000	10,000	80,000
563	Quaid-e-Azam University	Main	MedDeliver	70,000	3,900	73,900
564	Quaid-e-Azam University	Main	RF CONTROLLED WILDLIFE OBSERVATION ROBOT	70,000	10,000	80,000
565	Quaid-e-Azam University	Main	Soldier health and position tracking	70,000	10,000	80,000
566	Riphah International University	I-14 Campus	A flexible and programmable Digital Radio Mondiale	70,000	1,000	71,000
567	Riphah International University	I-14 Campus	Asfaleia	70,000	-	70,000
568	Riphah International University	I-14 Campus	Design and Fabrication of Medial Knee Unloader Via Reverse Engineering	70,000	9,500	79,500
569	Riphah International University	I-14 Campus	Design Development and Control of Prosthetic leg	70,000	8,500	78,500
570	Riphah International University	I-14 Campus	Detection of neuroplasticity by using a low cost Open BCI system	23,035	10,000	33,035
571	Riphah International University	I-14 Campus	Development of a software that assists speech therapy in Urdu	13,598	9,240	22,838
572	Riphah International University	I-14 Campus	Hybrid power generation	60,000	-	60,000
573	Riphah International University	I-14 Campus	Iris Based Lungs Disorder Diagnosis System	70,000	8,000	78,000
574	Riphah International University	I-14 Campus	Monitoring and controlling of a 3-phase single bus bar system using PLC and HMI	69,330	3,000	72,330
575	Riphah International University	I-14 Campus	Prototype of wearable exoskeletal unit using pneumatic actuator muscle and soft robotics	16,400	4,600	21,000



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
576	Riphah International University	I-14 Campus	Run time implementation of self-mixing laser interferometric sensor for vibration measurement	20,000	5,000	25,000
577	Riphah International University	I-14 Campus	Smart Visual Stethoscope	3,800	-	3,800
578	Riphah International University	I-14 Campus	Taqreeb	-	8,000	8,000
579	Sarhad University of Science and IT	Main	A Smart Walking Stick for Visually Impaired and Deaf Person	30,560	-	30,560
580	Sarhad University of Science and IT	Main	Car security system using fingerprints	63,620	-	63,620
581	Sarhad University of Science and IT	Main	DESIGN OF SMART SOLAR AND WIND (SWIND) SYSTEM	70,000	-	70,000
582	Shah Abdul Latif University, Khairpur	Main	Automatic watering plant system	-	-	-
583	Shah Abdul Latif University, Khairpur	Main	Weather Prophecy Expert	61,700	9,000	70,700
584	Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)	Hyderabad	Smart Drip Irrigation Controlling System	45,000	10,000	55,000
585	Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)	Hyderabad	Smart warehouse solutions	64,500	10,000	74,500
586	Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)	Islamabad	Android and web based Smart Grocery System	37,000	-	37,000
587	Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)	Islamabad	Android Application for Anemia detection	18,000	-	18,000
588	Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)	Islamabad	Courier Management System with Intelligent Cost Estimation	68,000	-	68,000
589	Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)	Islamabad	Object Sorting Arm	27,857	10,000	37,857
590	Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)	Main	Buffliating Machine	35,630	6,000	41,630
591	Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)	Main	Design and Fabrication of Energy Harvesting Lat pull-down Machine	34,320	3,990	38,310
592	Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)	Main	Garden Tech	41,700	10,000	51,700
593	Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)	Main	Paper Currency Bacteria Removal Processing Machine	68,300	-	68,300
594	Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST)	Main	Restaurant Order Taking System	8,775	2,372	11,147
595	Sindh Agrculture University	Tando Jam	SOIL MOISTURE TESTING SYSTEM USING SENSORS AND ARDUINO	2,785	-	2,785
596	Sindh Madresatul Islam University	Karachi	Automated Fish Recognition and Monitoring System	15,000	1,000	16,000
597	Sindh Madresatul Islam University	Karachi	Centralized Managed Virtual Desktop Infrastructure	70,000	-	70,000
598	Sindh Madresatul Islam University	Karachi	Criport	30,000	-	30,000



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
599	Sindh Madresatul Islam University	Karachi	Event Success Predictor	-	1,000	1,000
600	Sindh Madresatul Islam University	Karachi	Sawt-e-khaas (device for a deaf person while driving a car)	9,100	1,600	10,700
601	Sindh Madresatul Islam University	Karachi	Shadow of colors	55,000	9,750	64,750
602	Sir Syed University of Engineering and Technology (SSUET)	Main	Ai Surveillance UGV	68,000	5,500	73,500
603	Sir Syed University of Engineering and Technology (SSUET)	Main	Android Powered Car	50,200	-	50,200
604	Sir Syed University of Engineering and Technology (SSUET)	Main	ARTIFICIAL INTELLIGENCE BASED ENERGY MANAGEMENT AND CONTROL SYSTEM	69,260	9,200	78,460
605	Sir Syed University of Engineering and Technology (SSUET)	Main	Automatic Warehouse Control and Packaging by Image processing and three dimension Printer	59,100	-	59,100
606	Sir Syed University of Engineering and Technology (SSUET)	Main	Autonomous Hexacopter Product Delivery Using Intelligent Navigation System	67,091	6,000	73,091
607	Sir Syed University of Engineering and Technology (SSUET)	Main	Building Facilitation System	51,500	8,500	60,000
608	Sir Syed University of Engineering and Technology (SSUET)	Main	intelligent stove assistant	55,940	8,000	63,940
609	Sir Syed University of Engineering and Technology (SSUET)	Main	Opencv based hand gesture interface for keyboard and mouse with 100+ gestures	60,500	8,000	68,500
610	Sir Syed University of Engineering and Technology (SSUET)	Main	Path defined Wheelchair using Android	63,600	2,000	65,600
611	Sir Syed University of Engineering and Technology (SSUET)	Main	Prediction Based Electricity Consumption Alerts	45,420	8,000	53,420
612	Sir Syed University of Engineering and Technology (SSUET)	Main	Prognosis and Intervention for Burn Wounds Using Deep Learning	52,000	10,000	62,000
613	Sir Syed University of Engineering and Technology (SSUET)	Main	PROSTHETIC HAND USING EMG SIGNALS	65,200	10,000	75,200
614	Sir Syed University of Engineering and Technology (SSUET)	Main	Solar based hydroponics system	52,197	10,000	62,197
615	Sir Syed University of Engineering and Technology (SSUET)	Main	Surveying Drone	67,800	6,000	73,800
616	Sir Syed University of Engineering and Technology (SSUET)	Main	Three D printed Ear EEG Electrode design and its implementation	68,000	10,000	78,000
617	Sukkur IBA University	Main	Early Breast Cancer Detection Device	67,300	6,900	74,200
618	Sukkur IBA University	Main	ECHEMO LAB	64,499	-	64,499
619	Sukkur IBA University	Main	Power Electronics Trainer	68,522	10,000	78,522
620	Sukkur IBA University	Main	precious Plastic	65,900	10,000	75,900
621	Sukkur IBA University	Main	QRU Question Guru	69,379	9,992	79,371



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
622	Sukkur IBA University	Main	Smart Solar Hybrid Inverter in Grid Oriented System for Utilizing PV Energy	70,000	10,000	80,000
623	Sukkur IBA University	Main	Summarization of focused objects in eye tracking toolkit through video mining approach	70,000	-	70,000
624	Sukkur IBA University	Main	TicToc Courier	51,800	4,000	55,800
625	The Islamia University of Bahawalpur	Baghdad	Assistive text reading device for visually impaired people using computer vision methods	29,187	4,300	33,487
626	The Islamia University of Bahawalpur	Baghdad	Automatic Sun Tracking Smart Wheelchair with Real Time Navigation	65,245	9,860	75,105
627	The Islamia University of Bahawalpur	Baghdad	Autonomous Drone for Indoor Environment	42,628	-	42,628
628	The Islamia University of Bahawalpur	Baghdad	Autonomous Obstacle Avoidance with Monocular Percept	70,000	5,000	75,000
629	The Islamia University of Bahawalpur	Baghdad	Collective exploration of swarm robots	45,207	10,000	55,207
630	The Islamia University of Bahawalpur	Baghdad	Design and Fabrication of three D Printer	68,025	10,000	78,025
631	The Islamia University of Bahawalpur	Baghdad	Design and Implementation of Efficient LED Lighting System for a Classroom by using DIALUX	58,750	6,255	65,005
632	The Islamia University of Bahawalpur	Baghdad	Development of load management system for overhead lines using microcontroller	26,879	9,648	36,527
633	The Islamia University of Bahawalpur	Baghdad	Driver Drowsiness Detection system	32,100	10,000	42,100
634	The Islamia University of Bahawalpur	Baghdad	Emergency Fire Detection Extinguishing and Power Cutoff System Using Image Processing	43,450	10,000	53,450
635	The Islamia University of Bahawalpur	Baghdad	Hand Gesture and Recognition system for mute people	42,500	10,000	52,500
636	The Islamia University of Bahawalpur	Baghdad	Implementation of Simple and Accurate DC-DC Converter Module for Power Electronics Lab	30,410	-	30,410
637	The Islamia University of Bahawalpur	Baghdad	IOT Based Analysis And Control of Electrical Parameters Of Power Distribution System	50,390	9,873	60,263
638	The Islamia University of Bahawalpur	Baghdad	IoT based Face detection and recognition security system	42,950	10,000	52,950
639	The Islamia University of Bahawalpur	Baghdad	IoT based Home Automation	8,965	1,850	10,815
640	The Islamia University of Bahawalpur	Baghdad	Raspberry Pi Based Reader for Blind People	57,499	10,000	67,499
641	The Islamia University of Bahawalpur	Baghdad	Thyristor Controlled Starting of Single Phase Induction Motor for Limiting Inrush Current	22,670	8,500	31,170
642	The Islamia University of Bahawalpur	Baghdad	War field Spy and Defence Robot	29,613	1,810	31,423
643	The Superior College	University	Agri Hub	60,915	5,200	66,115
644	The Superior College	University	EMedic	41,500	10,000	51,500



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
645	The University of Agriculture, Peshawar	Main	An Immersive Three Dimensional Interactive Virtual Periodic Table	42,400	-	42,400
646	The University of Agriculture, Peshawar	Main	Semi Immersive Three Dimensional Interactive Virtual Mustard Plant in Biological Education	42,400	-	42,400
647	The University of Faisalabad	Engineering Wing	A Bidirectional Series-Resonant Converter With PWM Control And Load-Independent Voltage-Gain Characteristics	65,590	10,000	75,590
648	The University of Faisalabad	Engineering Wing	IOT based door security system using RFID	12,490	9,000	21,490
649	The University of Faisalabad	Engineering Wing	Smart Electricity Meter	69,100	6,500	75,600
650	The University of Haripur	Main	Autonomous Fire Extinguisher Robot Vehical	20,446	9,503	29,949
651	The University of Haripur	Main	Development of Monitoring Cloud Computing Platform for Agriculture	70,000	10,000	80,000
652	The University of Haripur	Main	Indigenous Security Checking Using Motion Detection	58,000	-	58,000
653	The University of Haripur	Main	Real Time Surveillance Security & Attendance System (Face Recognition Based)	13,150	-	13,150
654	The University of Haripur	Main	Smart irrigation System	30,100	10,000	40,100
655	The University of Haripur	Main	Smart Monitoring Robot for Hospital	20,158	1,500	21,658
656	The University of Haripur	Main	Solar Panels Automation Through Android	16,700	4,000	20,700
657	The University of Lahore	Main	Computer Aided Lung Cancer Diagnosis	30,000	6,000	36,000
658	The University of Lahore	Main	Smart Rollator	69,599	1,400	70,999
659	The University of Lahore	Sargodha	BLACK PERAL	30,000	-	30,000
660	The University of Lahore	Sargodha	My fit	2,200	2,650	4,850
661	The University of Lahore	Sargodha	Voicy	20,120	2,400	22,520
662	University of Agriculture	Main	A Multi Rotor Drone For Modeling Agriculture Fields	64,500	-	64,500
663	University of Agriculture	Main	AgriBot	59,870	9,908	69,778
664	University of Azad Jammu & Kashmir	Main	Arduino Based Ultrasonic Radar for Unauthorized Object Detection	48,600	10,000	58,600
665	University of Azad Jammu & Kashmir	Main	Autonomous Firefighting Robot Plus Drone	33,150	3,000	36,150
666	University of Azad Jammu & Kashmir	Main	Blood Community App	70,000	10,000	80,000
667	University of Balochistan	Main	Autonomous Robotic Lawn Mower	69,995	10,000	79,995



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
668	University of Balochistan	Main	Firefighter Robot	69,350	6,000	75,350
669	University of Balochistan	Main	Small Aerial Vehicles' Collaboration Using CoSLAM	70,000	10,000	80,000
670	University of Central Punjab	Main	Autonomous Room Cleaner Robot	69,609	1,500	71,109
671	University of Central Punjab	Main	Collaborative Mapping Using Swarm Robot	70,000	10,000	80,000
672	University of Central Punjab	Main	Hybrid Motorbike	70,000	10,000	80,000
673	University of Central Punjab	Main	Obstacle Avoidance using Stereo Camera	67,240	10,000	77,240
674	University of Central Punjab	Main	Smart Shopping Trolley	69,400	8,000	77,400
675	University of Engineering & Technology, Lahore	Faisalabad	Solar Power Based Three Phase AC drive using NI myRIO FPGA	37,250	8,300	45,550
676	University of Engineering & Technology, Lahore	Faisalabad	Virtual Dressing Room	12,000	-	12,000
677	University of Engineering & Technology, Lahore	Kala Shah Kaku	Efficient Lighting Test Facility	21,000	1,000	22,000
678	University of Engineering & Technology, Lahore	Kala Shah Kaku	Strider A Telepresence Robot	70,000	10,000	80,000
679	University of Engineering & Technology, Lahore	Kala Shah Kaku	Unified Server Fleet Management with SAP(Single Application Platform)	70,000	10,000	80,000
680	University of Engineering & Technology, Lahore	Lahore	Agri-Droid	68,500	1,000	69,500
681	University of Engineering & Technology, Lahore	Lahore	Extended Scan Eye	14,960	-	14,960
682	University of Engineering & Technology, Lahore	Lahore	Fuzzy Logic based STATCOM for transient stability	18,338	7,690	26,028
683	University of Engineering & Technology, Lahore	Lahore	MICRO GRID SYSTEM PROTOTYPE WITH DISTRIBUTED ENERGY RESOURCES AND BATTERY STORAGE	70,000	10,000	80,000
684	University of Engineering & Technology, Lahore	Lahore	NeoNest	57,900	3,600	61,500
685	University of Engineering & Technology, Lahore	Lahore	Robot path planning and optimization in virtual reality	70,000	10,000	80,000
686	University of Engineering & Technology, Lahore	Lahore	Smart mirror	20,750	4,000	24,750
687	University of Engineering & Technology, Lahore	Lahore	Three Dimensional Robotic Lifter Using Gesture Controlled Glove	41,762	8,400	50,162
688	University of Engineering & Technology, Lahore	Lahore	Wireless Charging Table for Electronic Gadgets	18,000	5,000	23,000
689	University of Engineering & Technology, Lahore	Rachna	Design and Implementation of Low Cost data Acquisition module for measuring Electrical and Mechanical Parameters	9,100	5,100	14,200
690	University of Engineering & Technology, Lahore	Rachna	Hardware solution to degradation of solar PV module	28,300	-	28,300



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
691	University of Engineering & Technology, Peshawar	Abbottabad	IOT and Solar Based Multipurpose Lawn mower	23,700	3,000	26,700
692	University of Engineering & Technology, Peshawar	Abbottabad	To design multilevel inverter using arduino as pulse generator and to decrease its size THD and increasing efficiency	62,785	4,200	66,985
693	University of Engineering & Technology, Peshawar	Main	A deep learning based campus surveillance and security system using three dimensional facial bio-metric	70,000	10,000	80,000
694	University of Engineering & Technology, Peshawar	Main	Blind Navigation System using Acoustic Tones	22,850	-	22,850
695	University of Engineering & Technology, Peshawar	Main	Design and Fabrication of Compressed Air Vehicle	70,000	10,000	80,000
696	University of Engineering & Technology, Peshawar	Main	Development of intelligent Multi Crop seed planter	53,050	800	53,850
697	University of Engineering & Technology, Peshawar	Main	Internet of things based safety system for coal mining workers	70,000	10,000	80,000
698	University of Engineering & Technology, Peshawar	Main	LPG AND NATURAL GAS DETECTION AND CONTROL	64,000	-	64,000
699	University of Engineering & Technology, Peshawar	Main	Prognostic Maintenance of Hydro Power Sub System Using Machine Learning Algorithm	70,000	-	70,000
700	University of Engineering & Technology, Peshawar	Main	Road Quality Monitoring Using Accelerometer And Global Positioning System(GPS)	66,690	9,000	75,690
701	University of Engineering & Technology, Peshawar	Main	Smart Agriculture Using IoT	8,200	-	8,200
702	University of Engineering & Technology, Peshawar	Mardan	A study of content based spam SMS detection for local languages	18,500	-	18,500
703	University of Engineering & Technology, Peshawar	Mardan	Applications of Automatic Street Lights and Car Parking Using IoT	10,670	1,600	12,270
704	University of Engineering & Technology, Peshawar	Mardan	Automatic Attendance using Face Recognition Through Raspberry pi	6,950	-	6,950
705	University of Engineering & Technology, Peshawar	Mardan	Detection of melanoma cancer through image processing	65,000	-	65,000
706	University of Engineering & Technology, Peshawar	Mardan	Gravitational Force based Automatic power generation Machine	68,500	6,800	75,300
707	University of Engineering & Technology, Peshawar	Mardan	Performance Evaluation of non linear Estimators using Genetic Programming	32,000	-	32,000
708	University of Engineering & Technology, Peshawar	Mardan	Real Time Face recognition base attendance System	66,000	5,000	71,000
709	University of Engineering & Technology, Peshawar	Mardan	Wind Power Forecasting Through Supervised Machine Learning Techniques	70,000	-	70,000
710	University of Engineering & Technology, Taxila	CASE	Android Native Travel Recommendation and Planner Application using Node js Express and Mongo DB	45,425	-	45,425
711	University of Engineering & Technology, Taxila	CASE	Automated Doctor Machine ADM	26,900	-	26,900
712	University of Engineering & Technology, Taxila	CASE	Dyno run bike engine performance analyzer	70,000	10,000	80,000
713	University of Engineering & Technology, Taxila	CASE	IOT Based Drip Irrigation System	36,300	1,447	37,747



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S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
714	University of Engineering & Technology, Taxila	CASE	NFV based firewall	70,000	8,000	78,000
715	University of Engineering & Technology, Taxila	CASE	OBE based FYP Management System	3,800	650	4,450
716	University of Engineering & Technology, Taxila	CASE	Real Time Body Motion Capture and Posture Correction	11,860	1,970	13,830
717	University of Engineering & Technology, Taxila	Chakwal	Automatic Multilevel Car Parking System	23,736	9,900	33,636
718	University of Engineering & Technology, Taxila	Chakwal	Autonomous Robotic Vehicle for Agricultural Applications	69,410	9,775	79,185
719	University of Engineering & Technology, Taxila	Chakwal	CNC Mobile Robot	41,170	3,150	44,320
720	University of Engineering & Technology, Taxila	Chakwal	COMPUTER VISION BASED SMART AIDING SYSTEM FOR VISUALLY IMPAIRED PERSON	43,275	7,000	50,275
721	University of Engineering & Technology, Taxila	Chakwal	Design and Automation of Miniature Tensile Testing Machine	50,300	9,400	59,700
722	University of Engineering & Technology, Taxila	Chakwal	Design and Implementation of PLC based Water Level Control System	52,055	2,500	54,555
723	University of Engineering & Technology, Taxila	Chakwal	IOT Based Health Monitoring System	13,000	10,000	23,000
724	University of Engineering & Technology, Taxila	Chakwal	Motion Intention Estimation using EEG for Rehabilitation	70,000	10,000	80,000
725	University of Engineering & Technology, Taxila	Chakwal	PLC Based Automatic Car Wash System Driven By Solar Tracking System	63,240	10,000	73,240
726	University of Engineering & Technology, Taxila	Chakwal	Three GHz frequency modulated continuous wave and doppler radar with switched beam	35,840	8,500	44,340
727	University of Engineering & Technology, Taxila	Taxila	3D Model Framework of Web Store Products in Augmented Reality	70,000	10,000	80,000
728	University of Engineering & Technology, Taxila	Taxila	A prototype for flood warning and management system using mobile networks	26,550	4,500	31,050
729	University of Engineering & Technology, Taxila	Taxila	An end to end framework for smart restaurant operation	70,000	10,000	80,000
730	University of Engineering & Technology, Taxila	Taxila	Commercial insurance app using AI	65,000	-	65,000
731	University of Engineering & Technology, Taxila	Taxila	Driver Assistance system	68,000	2,000	70,000
732	University of Engineering & Technology, Taxila	Taxila	GymFit-Workout Scheduling and Fitness Guidance Application	70,000	-	70,000
733	University of Engineering & Technology, Taxila	Taxila	Multivariant Drone Control using EEG signals Brain Computer Interface based on advanced machine learning tools	65,000	-	65,000
734	University of Engineering & Technology, Taxila	Taxila	Oil Refinery mimic and control through PLC	16,700	-	16,700
735	University of Engineering & Technology, Taxila	Taxila	Smart Meter Reader	69,995	10,000	79,995
736	University of Engineering & Technology, Taxila	Taxila	Smart Monitoring & Protection of Distribution Transformer	52,120	1,200	53,320





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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
737	University of Engineering & Technology, Taxila	Taxila	Smart Shoe: An Obstacle Detection Framework Using Wearable Sensors	63,980	5,840	69,820
738	University of Engineering & Technology, Taxila	Taxila	STUDENT ENGAGEMENT ANALYSIS USING FACIAL EXPRESSION RECOGNITION	62,000	9,000	71,000
739	University of Engineering & Technology, Taxila	Taxila	synchronization and analysis of olfaction enhanced multimedia	47,823	10,000	57,823
740	University of Gujrat	Hafiz Hayat	A photovoltaic based smart and portable street lightening system	60,310	10,000	70,310
741	University of Gujrat	Hafiz Hayat	AI based signal light for Railway Gate	69,500	10,000	79,500
742	University of Gujrat	Hafiz Hayat	Design and Implementation of A Remote Controlled Electric Road Sweeper	69,640	10,000	79,640
743	University of Gujrat	Hafiz Hayat	Design and Implementation of Digital Power Quality Based Energy Meter	61,000	9,000	70,000
744	University of Gujrat	Hafiz Hayat	Design and implementation of smart energy meter featuring load Management	8,595	3,500	12,095
745	University of Gujrat	Hafiz Hayat	The Power Jump	44,000	6,000	50,000
746	University of Gujrat	Hafiz Hayat	voice based web development platform	70,000	10,000	80,000
747	University of Karachi	Main	BCI Brain Computer Interface	40,724	6,850	47,574
748	University of Karachi	Main	Road Eye	70,000	10,000	80,000
749	University of Karachi	Main	Smart Mirror	70,000	5,000	75,000
750	University of Karachi	Main	Smart Agriculture Environment	68,000	10,000	78,000
751	University of Karachi	Main	Traffic Density Estimation System	70,000	10,000	80,000
752	University of Karachi	Main	Virtual Assistant for blind people	57,450	2,000	59,450
753	University of Management and Technology	Main	Artificial Intelligent Doctor	68,000	9,995	77,995
754	University of Management and Technology	Main	Autonomous Bottle Filling System	48,985	-	48,985
755	University of Management and Technology	Main	Avatar Based Cognitive Rehabilitation System	70,000	10,000	80,000
756	University of Management and Technology	Main	DC SMART GRID TRAINER	26,100	3,700	29,800
757	University of Management and Technology	Main	Gesture Controlled Wheelchair	52,240	9,950	62,190
758	University of Management and Technology	Main	LABORATORY EMULATION OF WIND TURBINE OPERATION	40,800	-	40,800
759	University of Management and Technology	Main	Solar Panel Cleaning Robot	39,780	2,905	42,685



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## LIST OF APPROVED FYP



S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
760	University of Management and Technology	Sialkot	Digital Exoplanet Hunting Observatory	50,000	10,000	60,000
761	University of Management and Technology	Sialkot	Real Time Driver Drowsiness Alert Mechanism	56,500	3,000	59,500
762	University of Management and Technology	Sialkot	Smart Garbage Collection system	68,400	10,000	78,400
763	University of Management and Technology	Sialkot	Smart human safety gadget	68,000	10,000	78,000
764	University of Sargodha	Main	Arduino Based Assistive Mobile Application for Blinds	14,310	3,690	18,000
765	University of Sargodha	Main	Cancer Identification	70,000	-	70,000
766	University of Sargodha	Main	Clean Pakistan	38,800	-	38,800
767	University of Sargodha	Main	PR SYSTEM	-	9,500	9,500
768	University of Sargodha	Main	Urdu Sentiment Analysis	40,000	5,000	45,000
769	University of Science & Technology	Main	Contact Meestri	53,200	10,000	63,200
770	University of Science & Technology	Main	High performance microstrip patch array antenna supporting 5G Applications	56,000	4,000	60,000
771	University of Science & Technology	Main	Search Around You	55,000	8,500	63,500
772	University of Sindh	Allama I.I Kazi	3D FPS High-End PC Game	70,000	10,000	80,000
773	University of Sindh	Allama I.I Kazi	AUTOMATIC RECYCLING WASTE SORTING PLANT	43,700	10,000	53,700
774	University of Sindh	Allama I.I Kazi	Fabrication of Flexible and Transparent Graphene Based Gas Sensor	70,000	10,000	80,000
775	University of Sindh	Allama I.I Kazi	Road Monitoring System Using Arduino	9,000	-	9,000
776	University of Sindh	Allama I.I Kazi	Smart Stroller	66,750	10,000	76,750
777	University of Sindh	Allama I.I Kazi	The Efficient Warehouse pick and place system	39,700	6,000	45,700
778	University of Sindh	Allama I.I Kazi	Theft Detection System For Vehicle By Face And voice Recognition	18,800	8,500	27,300
779	University of the Poonch	Main	Blind Aid Navigation Stick	6,790	-	6,790
780	University of the Poonch	Main	Green House monitoring system using Android application	61,450	10,000	71,450
781	University of the Poonch	Main	GSM Based Home Automaton using Arduino	25,146	8,000	33,146
782	University of the Poonch	Main	Hand Gesture Based Message Conveyer Glove For deaf and dumb	48,000	-	48,000



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S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
783	University of the Poonch	Main	IOT Based Smart Car Parking System with Andriod Application	67,500	10,000	77,500
784	University of the Poonch	Main	Paper Reading for Blinds using Raspberry Pi	68,350	9,000	77,350
785	University of Wah	Wah Engineering College	Customer Following Trolley For Shopping Malls	33,000	10,000	43,000
786	University of Wah	Wah Engineering College	Design and Fabrication of a Modular Reconfigurable Robot for Locomotion	32,916	8,000	40,916
787	University of Wah	Wah Engineering College	Design and Fabrication of an Earthworm Robot for locomotion in a medium sized pipe	37,150	3,200	40,350
788	University of Wah	Wah Engineering College	Design Development and Control of four degree of freedom robotic manipulator	45,740	5,000	50,740
789	University of Wah	Wah Engineering College	Energy Monitoring System For Houses and Small Industries	9,830	7,750	17,580
790	University of Wah	Wah Engineering College	Eye Movement Controlled Wheelchair	62,950	8,500	71,450
791	University of Wah	Wah Engineering College	Fully Automatic Solar Grass Cutter	26,960	7,100	34,060
792	University of Wah	Wah Engineering College	Two wheels self balancing robot	8,110	5,000	13,110
793	Usman Institute of Technology	Karachi	BIKE BASED ROAD CLEANING SYSTEM	69,600	5,000	74,600
794	Usman Institute of Technology	Karachi	Cashless System	-	-	-
795	Usman Institute of Technology	Karachi	Classification of Skin Disease using Image Processing	21,500	-	21,500
796	Usman Institute of Technology	Karachi	Deaf-Talk using MYO Armband	70,000	10,000	80,000
797	Usman Institute of Technology	Karachi	Deep image Prior	-	-	-
798	Usman Institute of Technology	Karachi	Digital Notice Board	48,100	2,000	50,100
799	Usman Institute of Technology	Karachi	Digital Twin of a Multi Function Protection Relay	53,844	230	54,074
800	Usman Institute of Technology	Karachi	Drowsiness Detection System	14,600	-	14,600
801	Usman Institute of Technology	Karachi	Gesture Talk	41,500	9,000	50,500
802	Usman Institute of Technology	Karachi	Home Water Controlling System Using IoT and Android mobile application	70,000	10,000	80,000
803	Usman Institute of Technology	Karachi	House Modeling and Cost Estimator App	3,500	5,400	8,900
804	Usman Institute of Technology	Karachi	Hybrid Motorcycle	69,080	10,000	79,080
805	Usman Institute of Technology	Karachi	Prepaid Energy Meter Using Smart Card	30,000	-	30,000



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S.No	Institute	Campus	FYP Title	Equipment Budget (Rs)	Miscellaneous Budget (Rs)	Total Approved Budget (Rs)
806	Usman Institute of Technology	Karachi	Smart Lock System	35,500	10,000	45,500
807	Usman Institute of Technology	Karachi	Speech Generation From Hand Gesture Recognition For The Vocally Impaired	19,940	4,000	23,940
808	Usman Institute of Technology	Karachi	Spheroid Wireless control spherical robot	67,600	10,000	77,600
809	Usman Institute of Technology	Karachi	Unified Power Quality Conditioner	28,200	1,150	29,350
810	Usman Institute of Technology	Karachi	Variable Pressure Water Turbine	63,000	-	63,000
811	Usman Institute of Technology	Karachi	VOICE AND IMAGE FEEDBACK CONTROL ROBOTIC ARM	23,300	7,200	30,500
812	Ziauddin University, ZUFEST	North Nazimabad	BLECHO	10,710	1,500	12,210
813	Ziauddin University, ZUFEST	North Nazimabad	Non Invasive Peptometer	18,600	-	18,600
814	Ziauddin University, ZUFEST	North Nazimabad	Rehabilitation Posture Correction using Neural Network	15,000	2,000	17,000
815	Ziauddin University, ZUFEST	North Nazimabad	Smart Mini Patient Monitor with App	27,042	-	27,042